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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/485,421A

DATE: 10/01/2001  
TIME: 13:50:54

Input Set : A:\Upn-4023.seq.app.txt  
Output Set: N:\CRF3\10012001\I485421A.raw

4 <110> APPLICANT: Ayyavoo, Velpandi  
5 Patel, Mamata  
6 Kieber-Emmons, Thomas  
7 Weiner, David B.  
8 Mahalingam, Sundaramy  
10 <120> TITLE OF INVENTION: Functional Fragments of HIV-1 VPR Protein and Methods  
11 of Using the Same  
13 <130> FILE REFERENCE: UPN-4023  
15 <140> CURRENT APPLICATION NUMBER: 09/485,421A  
C--> 16 <141> CURRENT FILING DATE: 2001-09-17  
18 <150> PRIOR APPLICATION NUMBER: 60/055,754  
19 <151> PRIOR FILING DATE: 1997-08-14  
21 <160> NUMBER OF SEQ ID NOS: 18  
23 <170> SOFTWARE: PatentIn Ver. 2.1  
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38 20 25 30  
40 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
41 35 40 45  
43 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
44 50 55 60  
46 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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68 Lys His Phe Asp Pro Arg Leu Leu Thr Ala Leu Gly Asn His Ile Tyr  
69 35 40 45  
71 Asn Arg His Gly Asp Thr Leu Glu Gly Ala Gly Glu Leu Ile Arg Ile

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72 50 55 60  
74 Leu Gln Arg Ala Leu Phe Met His Phe Arg Gly Gly Cys Ile His Ser  
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77 Arg Ile Gly Gln Pro Gly Gly Asn Pro Leu Ser Ala Ile Pro Pro  
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99 Asn Arg Glu Ala Val Asn His Leu Pro Arg Glu Leu Ile Phe Gln Val  
100 35 40 45  
102 Trp Gln Arg Ser Trp Arg Tyr Trp His Asp Glu Gln Gly Met Ser Arg  
103 50 55 60  
105 Ser Tyr Thr Lys Tyr Arg Tyr Leu Cys Leu Met Gln Lys Ala Val Phe  
106 65 70 75 80  
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128 20 25 30  
130 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
131 35 40 45  
133 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
134 50 55 60  
136 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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156 20 25 30  
158 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
159 35 40 45  
161 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
162 50 55 60  
164 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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186 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
187 35 40 45  
189 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
190 50 55 60  
192 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
193 65 70 75 80  
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212 20 25 30  
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217 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
218 50 55 60  
220 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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240 20 25 30  
242 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
243 35 40 45  
245 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
246 50 55 60  
248 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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268 20 25 30  
270 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
271 35 40 45  
273 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Pro Leu Ile Arg Ile Leu  
274 50 55 60  
276 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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 296 20 25 30  
 298 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
 299 35 40 45  
 301 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ser Leu  
 302 50 55 60  
 304 Gln Gln Leu Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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 324 20 25 30  
 326 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
 327 35 40 45  
 329 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
 330 50 55 60  
 332 Gln Gln Ser Leu Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg  
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 352 20 25 30  
 354 His Phe Pro Arg Ile Trp Leu His Ser Leu Gly Gln His Ile Tyr Glu  
 355 35 40 45  
 357 Thr Tyr Gly Asp Thr Trp Thr Gly Val Glu Ala Leu Ile Arg Ile Leu  
 358 50 55 60  
 360 Gln Gln Leu Ser Phe Ile His Phe Arg Ile Gly Cys Arg His Ser Arg

**VERIFICATION SUMMARY**

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